DISCLAIMER

This electronic version of an SCC order is for informational purposes only and is not an official document of the Commission. An official copy may be obtained from the Clerk of the Commission, Document Control Center.

APPLICATION OF

SALTVILLE GAS STORAGE COMPANY, L.L.C. **CASE NO. PUE-2001-00585**

For a Certificate of Public Convenience and Necessity under the Utility Facilities Act

REPORT OF MICHAEL D. THOMAS, HEARING EXAMINER

May 31, 2002

HISTORY OF THE CASE

On October 26, 2001, Saltville Gas Storage Company, L.L.C. ("Saltville" or the "Company") filed an Application with the State Corporation Commission (the "Commission") for a certificate of public convenience and necessity ("CPCN") under the Utility Facilities Act authorizing it to: (1) construct, develop, own, operate and maintain an underground natural gas storage facility (the "Storage Facility"), along with related facilities, at Saltville, Virginia; (2) construct, develop, own, operate and maintain an attendant pipeline facility approximately seven miles in length originating at the Storage Facility and terminating in Chilhowie, Virginia, along with related facilities; and (3) provide both firm and interruptible natural gas storage services to customers consistent with the Company's proposed Gas Tariff. Saltville proposes to offer Firm Storage Service ("FSS") pursuant to Rate Schedule FSS, which offers both 10-day withdrawal service and 20-day withdrawal service. Each tariff is designed so that service may be offered to potential customers at ranges between a floor and ceiling for each tariff rate. Saltville also proposes to offer Interruptible Storage Service ("ISS") pursuant to Rate Schedule ISS, which offers: (a) normal interruptible storage; (b) park and loan services; and (c) a negotiated service that will be primarily for shorter-term interruptible service.[1] The Company's Storage Facility will be connected with Virginia Gas Pipeline Company's ("VGPC") existing P-25 intrastate pipeline system, and East Tennessee Natural Gas Company's ("ETNG") interstate pipeline system.

On November 16, 2001, VGPC filed a Motion to participate as a party in the proceeding. Contingent upon the Commission granting Saltville's Application, VGPC requested authority to reduce its certificated service area to reflect the reduced scope of its operations. If the Application is granted, VGPC plans to file jointly with Saltville an application to transfer certain assets it owns to the Company, and it will refile its tariff sheets.

On December 3, 2001, the Commission entered an Order for Notice and Hearing. In the Order, the Commission granted VGPC's motion to participate as a party, assigned the matter to a Hearing Examiner, established a procedural schedule for filing testimony and exhibits, required the publication of public notice of the Company's Application, and scheduled a public hearing for February 20, 2002.

---

[1]The Company has withdrawn its request for a negotiated rate in its tariff. (Tr. at 55).

The hearing was convened as scheduled on February 20, 2002. JoAnne L. Nolte, Esquire, Danielle L. Smith, Esquire, and Mary Patricia Keefe, Esquire, appeared on behalf of Saltville and VGPC. Joseph W. Lee, Esquire, and Sherry H. Bridewell, Esquire, appeared on behalf of the Commission's Divisions of Energy Regulation, Public Utility Accounting, and Economics and Finance (the "Staff"). James R. Kibler, Jr., Esquire, and J. Patrick Nevins, Esquire, appeared on behalf of Dominion Greenbrier, Inc. ("Dominion Greenbrier"). Edward R. Petrini, Esquire, appeared on behalf of Public Service Co. of North Carolina, Inc. ("Public Service"). The proofs of publication notices were admitted into the record as Exhibits A, B, and C. No public witnesses appeared at the hearing. At the conclusion of a two-day hearing, the Hearing Examiner directed that post-hearing briefs be filed ten business days after the date the transcript was filed with the Clerk of the Commission. The Company, the Staff, Dominion Greenbrier, and Public Service filed post-hearing briefs. A copy of the transcript is being filed with this Report.[2]

SUMMARY OF THE RECORD

Written Comments

The Commission received written comments from Roanoke Gas Company ("Roanoke Gas") on February 14, 2002, supporting the Storage Facility. Roanoke Gas stated that the energy infrastructure within the Commonwealth would be strengthened, storage capacity of gas increased, and the efficiency and reliability of natural gas-fired generation would be increased.

Public Witnesses

No public witnesses appeared or testified at the hearing.

Testimony and Evidence

Saltville presented the testimony of six witnesses: Joseph A. Curia, vice president and general manager of Virginia Gas Company ("Virginia Gas"); Dr. Gabriel Fernandez, a faculty member of the University of Illinois in Urbana-Champaign in the Civil Engineering Department and an independent consultant; Kermit Allen, currently a consultant and retired as president and CEO of PB-KBB, a company specializing in designing underground gas storage facilities; Timothy L. Ferguson, director of gas operations for Virginia Gas; Randall J. Riha, director of project development and analysis for Duke Energy Gas Transmission; and Frank J. Hanley, president of the utility services division of AUS Consultants.

[2]On March 22, 2002, this case was re-assigned from Hearing Examiner Alexander F. Skirpan, Jr., who presided over the hearing, to Hearing Examiner Michael D. Thomas for preparation of the Hearing Examiner's Final Report. In the preparation of this Final Report, I reviewed the transcript of this proceeding and Exhibits 1 through 25 admitted into the record at the hearing on February 20 – 21, 2002. Additionally, I provided all parties an opportunity to recommend additions, deletions, amendments, modifications, or changes to the Examiner's outline of the issues in this case. The parties and Staff individually filed clarifications to the case issues on April 12, 2002.

In his prefiled direct testimony, Mr. Curia explained the structure of Saltville, described the proposed Storage Facility, the timeline for development, and the existing gas storage facility, and provided background information about underground storage of natural gas in salt caverns. Mr. Curia's testimony also addressed the need for additional storage, marketing efforts, the proposed rate of return, proposed rates, and the benefits of the proposed facilities to Virginia Local Distribution Companies ("LDCs"). (Ex. 1, at 2).

Mr. Curia stated that Saltville was organized as a limited liability corporation on August 15, 2001, and is domiciled in Virginia. The corporation consists of two members: NUI Saltville Storage, Inc. ("NUI Storage") (a Delaware corporation) and Duke Energy Saltville Gas Storage LLC ("Duke Storage") (a Delaware limited liability corporation). The two members of Saltville will each initially contribute $16.3 million towards the project, for a total of $32.6 million. Mr. Curia is an alternate NUI representative to the Saltville management committee, the general manager of VGPC, and the operating manager of Saltville. VGPC will soon file an application with the Commission for authority to serve as the operating manager of Saltville. As operating manager, VPGC will be responsible for all operational aspects of Saltville, including evaluation of the caverns, construction of the Storage Facility, installation of necessary equipment, and day-to-day operations, including filing any required certificate applications, which are subject to the approval of the Company's management committee. (*Id*. at 3-4; Tr. at 29). On cross-examination, Mr. Curia stated that he is aware that VGPC has a CPCN to operate a salt cavern storage facility in Saltville. (Tr. at 30).

At the hearing, Mr. Curia clarified for the record that the existing certificated area encompasses Ponds A, B, and C, Cavern 16, Cavern 20, the compressors, and a brine disposal well. There also currently exists a hundred gallon per minute evaporator facility, which takes brine out of the caverns to the surface and processes it. By-products are dry salt, which is marketed, and distilled water, which is discharged into McKinley Stream. Saltville will acquire this facility as a result of these proceedings. The proposed facilities for Phase I are Caverns 18, 19, 21, 22, 23, 24, 25, 26, 27, and 28. (Tr. 31-34).

In cross-examination Mr. Curia explained why VGPC isn't seeking to expand its existing certificate. Sometime in 1996, a Transfer Agreement between VGPC and Tennessee Energy Resources Company was executed. The Transfer Agreement provided for the initial development of Caverns 16 and 20 by VGPC, but provided that subsequent caverns would be developed in a joint venture. Mr. Curia was involved in negotiations with Duke Energy, the successor in interest to Tennessee Energy Resources, to put together a framework for development of the caverns. VGPC does not have the right to develop unilaterally the total area covered by its certificate. (Tr. 36-37).

Saltville proposes to convert existing salt caverns to natural gas storage caverns. The planned conversion will have two phases. Phase I, the development of the west end, estimated to take five years, may achieve an estimated 6.2 billion cubic feet ("Bcf") of working gas. Phase II, future development of the east end wells, could add approximately 4.4 Bcf of storage capacity. Mr. Curia explained that during Phase I, Saltville plans to develop four storage caverns consisting of ten existing wells. The development of Phase II will depend on market need. On cross-examination, Mr. Curia testified that the Company will need a minimum of 60 to 90 days after the Commission

grants a certificate to prepare the wells for the injection of gas. The Company had planned to do the first gas injections in April of 2002. (Tr. at 50-51).

VGPC has tested all of the brine wells that will be used for Phase I. These wells have been connected to brine caverns. VGPC discovered that all of the brine caverns were "pressure tight," having pressures ranging from 2000 pounds per square inch ("psi") to 2400 psi, the approximate maximum planned gas storage pressure. The brine wells were plugged thirty years ago and have maintained cavern pressure that has increased over time; therefore, the integrity of the cavern is nearly assured. Integrity tests will need to be done, however, after the project is certificated. (Ex. 1, at 5; Tr. at 64-65). Likewise, the actual capacity of the caverns will not be known until sonar and other tests are run. This testing, too, will occur only after the project has been certificated. (Tr. at 66).

Mr. Curia further stated it is estimated it will take five years to completely develop Phase I storage caverns at a cost of $90 million. The Storage Facility will be able to store 8.6 Bcf of total gas, including 6.2 Bcf of working gas, and will have a maximum withdrawal capacity of 550 million cubic feet per day ("MMcfd") and an average injection capacity of 225 MMcfd. (Ex. 1, at 6).

The certificated area in the Company's Application also includes the pipeline corridor for the approximately 6.5 miles of proposed attendant pipeline facilities. The pipeline facility will be constructed for the most part, if not entirely, within the same easements that VGPC utilizes for its current 8" interconnecting pipeline. However, in cross-examination Staff counsel clarified that pursuant to the Final Order in Case No. PUE960093, which provided approval to VGPC to construct, own, and operate a natural gas storage facility in the Town of Saltville, the certificate did not grant future right-of-way for a second potential pipeline connection to the Glade Spring compressor site. (Tr. at 51-52).

Currently, VGPC or Virginia Gas holds all the required permits for the existing VGPC Saltville facility. These permits can be used by VPGC as operating manager to operate both VGPC's storage facility and the Company's storage facility. (Ex. 1, at 8).

Mr. Curia stated that salt caverns permit a very high rate of gas deliverability based on the amount of gas stored. Storage volumes can be cycled up to eighteen times per year while in conventional depleted reservoir fields, storage volumes commonly are cycled only once. Mr. Curia states that customers such as LDCs, marketers, and power generators who have considerable hourly and daily swing requirements will favor salt cavern storage. (*Id*. at 9).

Mr. Curia states that demand for this type of facility is increasing for several reasons. LDCs will use the Storage Facility to provide a cushion for the hourly and daily changes in volumes of gas consumed by their customers. Likewise, natural gas-fired power generators will benefit from additional storage capacity since they too have swings in demand for power. Customers can use the Storage Facility to prepare for anticipated seasonal needs for additional natural gas. (*Id*. at 10).

VGPC's storage facility currently obtains its supply from the ETNG's 12" pipeline in Chilhowie, Virginia. Gas is taken from ETNG and flows through VGPC's 6.5 mile 8" pipeline

connecting the facility to ETNG's pipeline. VGPC's customers served from the facility include United Cities Gas Company, a Division of Atmos Energy, and Roanoke Gas Company, both of which serve Virginia customers. (Ex. 1, at 11). In addition, VGPC has already received numerous letters of interest and support from LDCs and power generators interested in acquiring high deliverability storage facilities. (*Id*. at 13; Tr. at 70).

Saltville proposes to offer a Firm and Interruptible Storage Service. Rate Schedule FSS will consist of a 10- and 20-day withdrawal service with two injection options under each service. Saltville proposes to implement a flexible rate schedule for each of these services. Rate Schedule ISS is comprised of a normal interruptible tariff, a park and loan service tariff, and a negotiated tariff primarily focused on shorter term storage needs. (Ex. 1, at 13). On cross-examination, Mr. Curia stated the Company withdraws its request for negotiated charges; therefore, the Commission should not consider the interruptible negotiated charge as part of the requested tariff. (Tr. at 55).

Mr. Curia stated that some flexibility in rates is required to make the Storage Facility attractive to potential customers. He anticipates that most of the storage service will be sold near the midpoint of the allowable range. In some cases, a rate lower than the midpoint may be used. This would occur in the following situations: (1) the customer is willing to commit to a longer contract term; (2) the customer is willing to commit to a larger quantity contract; or (3) the customer is willing to reduce his service requirements in exchange for lower rates. Saltville will also take into account a customer's transportation costs. Rate Schedule ISS is designed to optimize excess storage capacity when it becomes available. (Ex. 1, at 14).

Mr. Curia stated that by the end of the first phase, Saltville proposes a capital structure of 65% debt and 35% equity contributions. Saltville is requesting a 15% rate of return on equity capital. Saltville is requesting authorization to capitalize interest. During the first five years, total construction expenditures are estimated to be $90 million dollars. (*Id*. at 15-16).

Saltville would be operating in the certificated storage territory of VGPC, except that VGPC will reduce its certificated area, and thus be surrounded by the territory of Saltville. The integrity of VGPC's reduced certificated territory would be intact. The close proximity of the Storage Facility to the existing VGPC storage facility coupled with VGPC's position as operating manager, will enable the facilities to back-up for one another in the event of problems, seasonal emergencies and the like. (*Id*. at 16-17).

In his rebuttal testimony, Mr. Curia responded to several concerns raised by Staff witnesses. He stated that: (1) Saltville has no objection to its CPCN being limited to Phase I; (2) Saltville has no objection to providing the Staff with an Annual Informational Filing after one year of operational data has been accumulated, to allow the Staff to review the reasonableness of its storage rates; (3) Saltville has no objection to its CPCN containing a sunset provision; (4) Saltville's accounting records will comply with the Federal Energy Regulatory Commission Code of Federal Regulations, Conservation of Power and Water Resources, Number 18, Parts 1 to 399, revised as of April 1, 2001, and will be of sufficient detail that Saltville and VGPC will pay only their fair share of the facility's joint operating expenses; (5) Saltville has no objection to its CPCN containing a condition that it make a filing under the Utility Transfers Act to transfer the facilities outlined herein from VGPC to Saltville. (Ex. 14, at 2-5, 7).

In an effort to address concerns regarding the division of responsibilities between Saltville and VGPC, Mr. Curia explained that under the operating agreement, VGPC will be responsible for the day-to-day business and operating affairs of Saltville in accordance with policies established by Saltville's management committee. These services include: marketing, selling, trading or disposing of storage services on behalf of Saltville; negotiating, executing and implementing agreements on behalf of Saltville; purchasing or acquiring real and personal property on behalf of Saltville; and employing personnel on behalf of Saltville. Saltville's management committee consists of one member from Duke Storage and one from NUI Storage and is charged with the responsibility of managing all aspects of the business affairs of the Company, except those specifically delegated to VGPC. The management committee has the responsibility of establishing policies and goals, and business plans with which VGPC must comply. Saltville's management committee bears ultimate responsibility for the operation of the Storage Facility. Reporting to and assisting the management committee, are Saltville's marketing, technical, and operating committees, which will also consist of one Duke Storage representative and one NUI Storage representative. (*Id*. at 5-7; Tr. at 226-30).

In his prefiled direct testimony, Dr. Fernandez provided an evaluation of the structural integrity of the caverns that will be used for the Storage Facility and recommendations for Saltville to follow as it develops and operates its natural gas storage facility. Dr. Fernandez evaluated the structural stability of the existing caverns around Wells 13, 14, 15, 18, 19, 21, and 22 through 28, and assessed the potential ground subsidence above these caverns, which are being considered for future storage operations. The process Dr. Fernandez used for his study included the following: (1) an evaluation of the subsurface conditions in the storage area; (2) a review of available data on past ground subsidence and sinkhole activity in the area; (3) a determination of the size, shape, depth, and location of existing caverns in the proposed storage field and adjacent areas based on recent sonar surveys and salt production results; (4) an evaluation of the structural behavior of existing storage Caverns 16 and 20, which have been successfully operated for the last five years; (5) an estimate of the magnitude and distribution of corresponding stresses and deformations around the proposed storage caverns and the resulting ground subsidence using the "calibrated" finite element model which was derived during the evaluation of the existing storage Caverns 16 and 20; (6) a comparison of the magnitude and distribution of certain key parameters for the present and proposed cavern operations; and (7) a comparison of the estimated stress levels at strategic locations between adjacent caverns and the strength of the rock materials at these locations to obtain a factor of safety against rupture. (Ex. 2, Executive Summary at 1, 2).

In cross-examination, Dr. Fernandez explained that the modeling process was done by reproducing the behavior of the cavern currently in use, Wells 16 and 20, with a computer model. Then with a calibrated model, he analyzed the proposed caverns to identify or assess the structural behavior. Dr. Fernandez further stated that there are many similarities between the cavern in use and the proposed caverns, including the geological setup, the salt formation, depth of the caverns, and size of the caverns. He concluded by stating that the key parameters are very similar. (Tr. at 82). Since his report of March 2000, there has been further testing to verify which caverns are connected and which ones are not, although there is no written report containing these findings. (Tr. at 84).

The results of Dr. Fernandez's study indicated a safe, elastic behavior of the pillar between caverns as well as of the salt materials surrounding the openings, even under the most critical operating conditions. Dr. Fernandez recommended a survey and instrumentation program to monitor ground behavior above the storage area. Specific guidelines were provided to evaluate data collected from the monitoring program. Included were certain "threshold" values for key parameters, which if exceeded would trigger prompt evaluation of the structural stability of these caverns and more frequent surveillance and/or modification of storage operations. (Ex. 2, Executive Summary at 3). Dr. Fernandez's recommendations for monitoring ground behavior included four basic measurements: (1) periodic level surveys of the ground surface above the storage field; (2) annual gamma ray and caliper logging of all active storage cavern wells; (3) periodic sonar surveys of active caverns to monitor their dimensions; and (4) injection pressures, flow rates, and cumulative gas volumes. (*Id*. at 4).

Company witness Kermit Allen submitted prefiled testimony on the integrity, general size, depth and shape of the Company's caverns, and why these caverns are suitable for gas storage. Mr. Allen explained that in 1996, VGPC converted a brine cavern left over from a salt mining operation to a natural gas storage facility. This existing cavern has been successfully operated since its certification in 1997 and is in close proximity to the proposed facility. (Ex. 3, at 2).

Saltville plans to convert four brine caverns to natural gas storage. The conversion will take approximately five years. The four caverns are approximately 3000 feet deep and vary in size from 200,000 barrels to 7,500,000 barrels. The working gas storage capacity of the wells ranges from .144 Bcf to 4.395 Bcf. The estimated volume of each cavern was determined using an industry method based on the volume of brine removed from the caverns. (*Id.* at 3, 4). The successful conversion of the four caverns will result in an approximate usable volume of 6.2 Bcf. Based on preliminary investigations by Saltville, the brine wells for the proposed conversion are pressure tight. They were shut over 30 years ago and have maintained pressure since then. This is a good indication that the final mechanical integrity test will be successful. (*Id.* and Tr. at 120). Mr. Allen has evaluated over 100 of these types of caverns and based on this experience, he is confident the Saltville caverns will pass the final integrity test. Tests performed on the caverns indicate no leaks and no communications between the caverns. The final mechanical test will be performed after the Commission grants a certificate. (Tr. at 122-23, 128).

Industry or other guidelines regarding the spacing of caverns were written for property lines and the storage of different products in adjacent caverns. In this case, the product being stored is the same for all the caverns as is the pressure. Mr. Allen testified that it would be no problem even if all of the caverns washed together as one cavern (Tr. 131). Mr. Allen believes that with his experience in the field and the information available, these caverns are suitable for the proposed project as outlined in the Application. (Tr. 140).

Company witness Ferguson, in his prefiled testimony, discussed the estimated costs of the project, construction plans, the timing of the project, the surface facilities and general operations, environmental permits Saltville expects to obtain, and general safety and operational procedures. The proposed surface facilities will be comprised of the brine holding ponds, storage compression and related gas processing equipment, gas piping, brine piping, measurement and flow control, a

new operations building, security fencing, and additional buffer property. At some point in the near future, the Company also plans to install an evaporator plant to handle brine disposal. (Ex. 4, at 3).

Supply for the storage facility injections will come primarily from ETNG's existing 12-inch pipeline, and the proposed ETNG 24-inch Patriot pipeline. During the first year of operation, Saltville will be using the equipment that was installed for use in VGPC's facility, including storage compressor units, station piping, brine ponds, an existing evaporator plant and a disposal well, as well as VGPC's 8-inch P-25 pipeline that connects the facility to ETNG's interstate pipeline. Saltville intends to install sufficient equipment to accommodate up to 225 MMcfd of injection capability and sustain up to 550 MMcfd of withdrawal. The attendant 20-inch, 16-inch, and 12-inch gas piping to connect the compressor station and wellheads will be designed for a maximum allowable operating pressure (MAOP") of 2400 pounds per square inch gauge ("psig"). Additionally, Saltville intends to install approximately 7 miles of 24-inch pipe with a MAOP of 1220 psig to connect to ETNG's interstate pipeline. This pipeline will parallel VGPC's existing 8-inch pipeline from Saltville, Virginia to Chilhowie and will remain within VGPC's existing right-of-way. As the new storage caverns are developed, it is the intention of Saltville and VGPC to operate the area as a pool and share common equipment to the greatest extent possible. The three brine holding ponds, the 100-gallon per minute ("gpm") evaporator plant, the EH-131 disposal well and approximately 600 acres of land will be transferred from VGPC to Saltville for its use. This represents NUI Storage's $16.3 in-kind contribution to the venture. (*Id*. at 4-7).

Mr. Ferguson provided a summary of the capital investment needed for this project: gas compressor units, $9.2 million; gas processing equipment, $6.55 million; measurement and flow control equipment, $1.51 million; brine and gas piping with ancillary equipment, $2.25 million; 7-mile connecting pipeline, $5.4 million; improvements to the brine holding ponds, $1.52 million; new brine evaporator plant, $14.74 million; site and facility improvements, $2.3 million; cavern conversion, $13.38 million; base gas, $8.79 million (estimated at $3.75/mcf); and $420,000 to upgrade brine disposal well EH-131. (*Id*. at 4-10).

Mr. Ferguson states VGPC and Virginia Gas currently hold all the permits necessary for the operation of an underground natural gas storage facility. Once approved as operating manager, VGPC can use its existing permits to operate Saltville's Storage Facility. VGPC will seek any additional permits required for the Storage Facility. The pipeline facilities will be constructed in accordance with Department of Transportation ("DOT") standards for gas transmission lines. Saltville performed an environmental assessment at the site and its operations would have minimal impact on the environment. (*Id*. at 11-12).

In his rebuttal testimony, Mr. Ferguson responded to the issues raised by the Department of Environmental Quality ("DEQ") in its coordinated environmental review, and by Staff witness Hotinger in his direct testimony.

In response to the DEQ review, Saltville retained Williamsburg Environmental Group ("WEG") to address several of DEQ's concerns. WEG has inspected the area around the proposed facility and conducted an inventory of rare and endangered plant species. A copy of WEG's report will be provided to the Department of Conservation and Recreation. Additionally, WEG has conducted a wetlands survey and found one small area on its proposed site. No construction is

planned near this area. Additionally, WEG found six wetlands areas along the pipeline corridor. These areas will be addressed in a Joint Permit Application to be filed with the Army Corps of Engineers.

Regarding the archaeological site, Saltville intends to enter a Memorandum of Agreement with the Department of Historic Resources and the Army Corps of Engineers regarding construction in and around this site. Mr. Ferguson stated that Saltville intends to comply with DEQ's remaining recommendations, or has already complied with them. (Ex. 19, at 2-4).

Mr. Ferguson reported that the additional testing of well EH-131 indicates the well is not suited for brine disposal. (*Id*. at 5).

Saltville intends to submit revised manuals reflecting the identity of the operator of the facility after the Commission approves the operating agreement. Mr. Ferguson believes it would be premature to include the name of the operator at this time. (*Id*. at 4).

Mr. Ferguson agreed that Mr. Hotinger raised an important point concerning long-range planning for potential growth near the pipeline and the possible change in pipe wall thickness. Saltville's engineers will thoroughly review the pipeline corridor to see if it would be prudent to increase further the percentage of Class 2 pipe based on the probability of potential growth near the corridor. Saltville also stated, however, that it would consider the economic impact of any such analysis. Saltville will provide the final construction drawings and specifications to the Staff in advance of construction, as requested by Mr. Hotinger. (*Id*. at 6).

Saltville discussed the permitting issues with the Department of Mines, Minerals and Energy ("DMME"). The permit to mine salt is currently held by Virginia Gas. DMME prefers that the operator, VGPC, be named in the permit, but the permit may be held by VGPC's parent company, Virginia Gas, as long as DMME has assurance that accountability for the permit requirements is maintained. To eliminate any confusion, Virginia Gas will pursue transferring the permit to VGPC after the Commission approves the operating agreement. VGPC has reviewed all of the permits held by VGPC or Virginia Gas and had ensured that the permits are valid and will permit VGPC to act as the operating manager for Saltville. (*Id*. at 7).

Finally, Mr. Ferguson stated the safety, stability and integrity of the salt caverns that will be used for gas storage are of paramount concern to Saltville. It intends to comply with Dr. Fernandez's recommendations whether or not the recommendations are imposed as conditions in the CPCN. (*Id*. at 8).

Mr. Riha's testimony covered the public need for additional natural gas storage, and Saltville's marketing efforts. In general, the Storage Facility should boost exploration and production of natural gas in Virginia, West Virginia and Kentucky, and increase the use of natural gas from these states on ENTG's pipeline system. Mr. Riha explained that Appalachian wells are characteristically low volume wells. Many are coalbed methane wells that must flow constantly. Because of these limitations, a gas customer must draw its gas supply from many wells to meet its usage requirements. During off-peak periods, the wells have to be physically shut off. A storage facility would enable greater development of natural gas in the region and make the wells in the

region more efficient to operate. Additionally, the Storage Facility's high deliverability storage is a perfect match for the operational requirements of the new gas-fired generation facilities locating in Virginia. Its location will provide a critical service and allow the natural gas infrastructure to expand to meet growth demand in Virginia. It would temper a natural gas user's need to purchase Gulf Coast to city gate firm transportation service to guarantee supply during peak winter days. It would free up additional pipeline capacity during the winter months. Customers would no longer need to contract for full path, long haul pipeline capacity, but could instead purchase storage capacity to meet winter peaks. The Storage Facility would provide another injection point for natural gas into ETNG's system, increasing system reliability and allowing peak-day winter service. It would offer customers a storage option that is more economical than liquefied natural gas. The facility will attract industrial, commercial and residential development and power generation because it allows a customer to store excess gas for future consumption. (Ex. 6, at 2-5).

Mr. Riha identified Saltville's potential customers. Saltville will primarily market its services to ETNG customers in Virginia and Tennessee, as well as customers in Virginia and North Carolina who can access the facility through the Patriot pipeline and Transco's pipeline. At present, approximately 30%, or 1.875 Bcf, of the total capacity planned for Phase I has been subscribed. The following customers, through their transportation contracts with ENTG, have subscribed to the Patriot expansion, and designated Saltville the receipt point of their gas: NUI Energy Brokers (25 MMcfd); Duke Energy Wythe, LLC (20 MMcfd); Henry County Power (50 MMcfd); Duke Energy Murray (50 MMcfd); and Public Service (15 MMcfd). Mr. Riha also identified the LDCs and power generators that have expressed interest in the Storage Facility. These include Roanoke Gas Company, Southwestern Virginia Gas Company, United Cities Gas Company, Competitive Power Ventures, Inc., and Constellation Energy. Saltville intends to market its services to these companies after the Commission approves its rates and services. Saltville anticipates having no excess storage capacity. (*Id*. at 7).

As a representative of the Duke Storage half of the joint venture, Mr. Riha testified Duke Energy Gas Transmission will make an initial $16,321,397.00 cash investment to Saltville to match the NUI member's initial in-kind contribution. After the initial contribution, the two members of the LLC will share, on a fifty-fifty basis, all further cash contributions to the venture. (*Id*. at 8).

Mr. Hanley's testimony covered the fair rate of return for Saltville's projected rate base for years 2002 through 2007, when Phase I is expected to be completed. In his opinion, Saltville's requested 10.45% overall rate of return and 15.00% return on equity capital are conservative. (Ex. 8, at 2, 60).

Mr. Hanley explained that Saltville is a start-up LLC with just two members. It has no common stock that will be traded. For this reason, Mr. Hanley believes proxy groups must be used to determine a reasonable cost of capital for Saltville. Mr. Hanley found that there were no gas storage LLCs from which market-based capital costs could be determined. Additionally, there were no stand-alone gas storage companies whose common stocks were actively traded. In his analysis, Mr. Hanley used a proxy group of sixteen gas distribution companies and a group of four diversified gas companies. Mr. Hanley observed that Saltville's operations are distinctly different from these two groups in several key respects. The use of salt caverns for natural gas storage is unique. Also unique is the long development horizon before the Company is fully operational, five years before

Phase I is complete. Saltville faces significant market risk in the absence of long-term storage contracts, which would more nearly coincide with the useful life of the expected rate base. Mr. Hanley did not reflect these risks in his analysis, but he did adjust Saltville's rate of return on equity to reflect its greater financial risk and greater business risk attributable to its small size. (*Id*. at 2-4).

Mr. Hanley described financial risk as the additional risk created by the introduction of debt into the capital structure. The greater the level of debt employed in the capital structure, the greater the risk to the common shareholders. The shareholders therefore require greater compensation, a higher rate of return, for assuming that additional risk. In order to recognize Saltville's greater financial risk vis-à-vis either of his proxy groups, Mr. Hanley included in his analysis a 0.40% financial risk adjustment for his proxy group of gas distribution companies and a 0.80% financial risk adjustment for his proxy group of diversified gas companies. (*Id*. at 9-10, 52-54).

Mr. Hanley described "business risk" as a term encompassing all of the diversifiable risks of an enterprise except financial risk. The size of a company affects its level of business risk. Typically, smaller companies are less capable of coping with significant events that affect sales, revenues and earnings. For comparison, Mr. Hanley found of his proxy groups that gas distribution companies were, on average, likely to be 17.8 times larger than Saltville, and the diversified gas companies were, on average, likely to be 47.9 times larger. Mr. Hanley believes the "small-firm effect" should be recognized in this case and factored into Saltville's return on equity capital. In order to recognize Saltville's small size and significantly greater business risk, Mr. Hanley adopted a size premium differential of 1.50% vis-à-vis his proxy group of gas distribution companies and 2.00% for his proxy group of diversified gas companies. Mr. Hanley noted that these adjustments do not reflect all of Saltville's added business risk vis-à-vis the proxy groups due to the start-up nature of Saltville's gas storage operations. (*Id*. at 6-8, 54-56).

Saltville is projecting a return on rate base of –0.77% in 2002; 1.31% in 2003; 3.11% in 2004; 5.95% in 2005; 8.76% in 2006; and 10.45% in 2007. (*Id*. at 10, Saltville Exhibit 30 at Schedule 3).

For purposes of determining its 10.45% overall cost of capital, Saltville has proposed a capital structure of 65% long-term debt and 35% equity capital. His analysis showed that over a five-year period his proxy group of sixteen gas distribution companies averaged 58% long-term debt and 42% equity, and his proxy group of four diversified gas companies averaged 49% debt and 51% equity. Given Saltville's relatively small size and the five-year development horizon before it can earn its cost of capital, Mr. Hanley believes a 35% equity ratio is conservative. (*Id*. at 13-15).

Mr. Hanley believes Saltville's assumed 8.00% long-term debt cost rate is reasonable for cost of capital purposes. (*Id*. at 15-16).

Mr. Hanley employed the Discounted Cash Flow ("DCF"), the Risk Premium Model ("RPM"), the Capital Asset Pricing Model ("CAPM"), and the Comparable Earnings Model ("CEM") in his cost of equity capital analysis, which he applied to both of his proxy groups. His indicated cost rates from his DCF analysis were 12.6% for the proxy group of gas distribution companies, and 15.0% for the proxy group of diversified gas companies. (*Id*. at 22-31). In his RPM analysis, Mr. Hanley calculates an equity risk premium for the proxy group of gas distribution companies of 5.2%, and 5.4% for the proxy group of diversified gas companies. He applied this to

his prospective bond yields for the two groups of 7.7% and 7.6%, respectively, which resulted in cost rates of 12.9% for the proxy group of gas distribution companies and 13.0% for the proxy group of diversified gas companies. (*Id*. at 31-41). In his CAPM analysis, Mr. Hanley used both a traditional CAPM and an empirical CAPM ("ECAPM"). The average traditional CAPM cost rates for both proxy groups was 11.2%, while the average ECAPM for both proxy groups was 12.3%. Mr. Hanley averaged the two results to produce an 11.8% cost rate applicable to both proxy groups. (*Id*. at 41-46). Finally, Mr. Hanley's CEM results showed a 13.3% median Value Line five-year projected return on equity for both proxy groups. (*Id*. at 46-50).

Mr. Hanley's analysis is summarized in the table below:

Saltville Gas Storage Company, LLC
Summary of Equity Cost Rate

	Proxy Group of Sixteen Natural Gas Distribution Companies	**Proxy Group of Four Diversified Natural Gas Companies**
Discounted Cash Flow Model	12.6%	15.0%
Risk Premium Model	12.9	13.0
Capital Asset Pricing Model	11.8	11.8
Comparable Earnings Analysis	13.3	13.3
Indicated Common Equity Cost Rate before Investment Risk Adjustments	12.65%	13.28%
Investment Risk Adjustments		
Financial Risk Adjustment	0.40	0.80
Business Risk Adjustment	1.50	2.00
Recommended Equity Cost Rate after Investment Risk Adjustment	14.55%	16.08%
MidPoint of the Range between the Two Proxy Groups	15.32%	

Ex. 8, Saltville Exhibit 30 at Schedule 1.

Although Mr. Hanley's analysis resulted in an indicated equity cost rate for Saltville of 15.32%, Saltville has requested only a 15.00% equity cost rate in its Application. For this reason, Mr. Hanley believes the 15.00% common equity cost rate for Saltville is conservatively reasonable, especially considering Saltville's additional business risks that were not factored into his analysis. (*Id*. at 57-60).

In his rebuttal testimony, Mr. Hanley took issue with Staff witness Maddox's recommended 12.50% cost of common equity. He believes the Staff's recommended equity cost rate is significantly understated for six primary reasons. (Ex. 20, at 1-3).

First, he believes the growth rates utilized in the Staff's DCF analysis were not reflective of the growth rates expected by investors, which results in the Staff's DCF-derived cost rates to be understated. The Staff's methodology gave unspecified weight to historical growth in dividends per share and used an average of a least squares method, compound growth rate, and average annual growth rates. Mr. Hanley is unaware of any investor-influencing organization that provides such an amalgam of growth rates to investors. He believes the use of historic growth rates is suspect, and expected earnings per share should be used as a proxy for the expected rate of growth in market price appreciation. (*Id*. at 3-5).

Second, the Staff's ex-ante risk premium-derived cost rate is significantly understated due to the circularity of the study used to determine the Staff's equity risk premium. In the study, the equity risk premiums were derived from DCF calculated common equity cost rates. To the extent the DCF cost rates do not reflect investors' expected rate of return, the resulting equity risk premiums would not properly measure the equity risk premiums expected by investors. (*Id*. at 5-6).

Third, the CAPM is based on future expectations. The results of the Staff's CAPM are understated because Staff used an historical twelve-month average yield of 5.3% on the 30-year U.S. Government T-Bond when it should have used the consensus average forecasted yield of 5.7%. The Staff should not have relied solely on an historical market risk premium, but should have taken into account expected market appreciation such as that forecasted by Value Line. Finally, the Staff should have used the ECAPM because the traditional CAPM tends to understate the cost rate for common equity capital for companies whose common stocks have betas less than 1.0, which includes all of the proxy companies. (*Id*. at 6-8).

Fourth, the Staff limited its adjustment for financial risk to the proxy group of sixteen gas distribution companies. The Staff should have recognized in its analysis the difference in financial risk between Saltville and the proxy group of diversified gas companies. Mr. Hanley calculated a 0.47% financial risk adjustment using the Staff's proxy group of six diversified gas companies. According to Mr. Hanley, this adjustment recognizes Saltville's greater financial risk vis-à-vis the proxy group of diversified gas companies. (*Id*. at 9-10; Tr. at 288-89).

Fifth, the Staff places unjustifiable emphasis on the identity of Saltville's investors, which are its corporate parents. According to Mr. Hanley, those investors are entitled to the same return as any other investor who would theoretically invest in Saltville. In effect, the Staff is engaged in "investor profiling," which Mr. Hanley believes is impermissible. (*Id*. at 10-11; Tr. at 290-91).

Finally, the Staff failed to recognize the business risk associated with the project, the small company risk adjustment, and the long time horizon before there is an expectation that Saltville will earn up to its authorized rate of return. (*Id*. at 11-12; Tr. 292-97).

Mr. Hanley made adjustments to the results of the DCF, Risk Premium and CAPM analyses used by Mr. Maddox on his proxy groups of sixteen gas distribution companies and six diversified

gas companies, to correct for the errors in the Staff's methodology outlined above. The results of these corrections are summarized below:

Saltville Gas Storage Company, LLC
Revised Summary of Equity Cost Rates

	Proxy Group of Sixteen Gas Distribution Companies	Proxy Group of Mr. Maddox's Six Diversified Gas Companies
Discounted Cash Flow Model	13.08%	15.14%
Risk Premium Model	10.40	10.40
Capital Asset Pricing Model	11.95	12.60
Indicated Common Equity Cost Rate before Investment Risk Adjustments	11.81%	12.71%
Investment Risk Adjustment		
Financial Risk Adjustment	0.40	0.47
Business Risk Adjustment	1.50	2.00
Recommended Equity Cost Rate after Investment Risk Adjustment	13.71%	15.18%
Midpoint of the Range between the Two Proxy Groups	14.45%	

Id. at 17.

Mr. Hanley believes the 14.45% average cost rate is extraordinarily conservative. In support of his position, he states the risk premium cost rate of 10.40% is seriously understated, the adjustments for Saltville's small size are conservatively justified, the adjustments in recognition of Saltville's greater business risk are conservative, and the cost rate does not take into account the extraordinary early year losses as to net income and the *de minimis* returns on expected rate base. (*Id*. at 17-18).

On cross-examination, Mr. Hanley stated Mr. Maddox should have relied on analysts' estimates of growth and earnings per share, rather than giving too much weight to historic dividend growth rates. Mr. Hanley believes historic growth rates are irrelevant in these economic times, and for the energy industry. In his opinion, the market responds emphatically and dramatically to analysts' projections and actual earnings reports vis-à-vis those projections. (Tr. at 299-300, 304-5).

The Staff presented the testimony of five witnesses: James M. Hotinger, senior utilities engineer with the Division of Energy Regulation; Dr. Andrew H. Merritt, an engineering geology and applied rock mechanics consultant retained by the Division of Energy Regulation; Richard W. Taylor, manager of audits for the Division of Public Utility Accounting; John A. Stevens, senior

utilities engineer with the Division of Energy Regulation; and Farris M. Maddox, principal financial analyst with the Division of Economics and Finance.

The prefiled testimonies of Messrs. Hotinger, Merritt, and Taylor were stipulated into the record. (Tr. at 209-213).

Mr. Hotinger's testimony addressed the natural gas pipeline safety aspects of the Company's Application. Saltville stated it intends to construct approximately 5,000 feet of 12-, 16-, and 20-inch steel piping with a MAOP of 2,400 psig to connect the compressor stations to the various storage cavern wells. In addition, the Company plans to construct approximately 7 miles of 24-inch steel X-65 grade pipe with an MAOP of 1,220 psig to connect the Storage Facility with Duke Energy's pipeline in Chilhowie, Virginia. This pipeline will parallel an existing pipeline owned by VGPC. The Company is proposing to maintain a 20-foot separation between the new and existing pipeline. (Ex. 10, at 1-2).

Mr. Hotinger outlined the Commission's pipeline safety regulations and the fact the entire facility is considered a transmission line as a result of its location, operating pressure, or pipe wall thickness. Consequently, the Company's specifications must comply with Part 192 of the Commission's pipeline safety regulations and include, among other things, procedures for the storage and handling of the pipe, welding, trenching, backfilling, directional drilling, testing, pipe coating, repair of defects, and inspection of the construction activities. The specifications must be prepared prior to the commencement of construction and Saltville must ensure that the facility is constructed in accordance with the specifications. (*Id*. at 3).

As part of its Application, Saltville filed a proposed Operations and Maintenance, Emergency, Anti-Drug, and Alcohol Misuse Manuals. No Operator Qualification Manual or comprehensive written construction specifications for the facility have been submitted to the Staff. Mr. Hotinger noted that the manuals submitted to the Staff do not recognize the fact that the facility will be owned by Saltville, but operated by VGPC. He recommends that the manuals be revised to recognize this distinction. (*Id*. at 4).

Additionally, Mr. Hotinger made several recommendations regarding the construction of the pipeline. He noted that many companies design natural gas pipelines to exceed the requirements of Part 192 of the Commission's pipeline safety regulations. Such actions would include: increasing the wall thickness or strength of the pipe; burying the pipeline deeper, or operating the pipeline at a lower operating pressure. Mr. Hotinger recommended that the Company initially use a thicker wall pipe and construct the entire pipeline to meets the requirements for a Class 2 location, although the majority of the pipeline is in a Class 1 location, with a small percentage in Class 2.[3] He noted this would allow the pipeline to operate at a lower stress level, meet the minimum requirements for a Class 2 area should the class location ever change, and eliminate the requirement to replace the pipe or lower the operating pressure if the class location changes from 1 to 2 in the future. (*Id*. at 5-7).

Mr. Hotinger also recommended that the Commission condition the issuance of a CPCN to the Company by requiring the Company to submit to the Staff the comprehensive specifications for

[3]A Class 1 area has less than 10 buildings designed for human occupancy within 220 yards of either side of the pipeline. Class 2 areas have between 10 and 46 buildings within a continuous mile.

all portions of the pipeline facilities at least 30 days prior to the commencement of construction, and that all required federal and state operating permits be reviewed to ensure that the correct entity is named in the permit. (*Id*. at 6-8).

Dr. Merritt evaluated the geological and geo-technical aspects of the development and operation of the proposed Storage Facility. Dr. Merritt reviewed Company witness Fernandez's recommendations, found on pages 22-25 of his prefiled testimony, and advised that these recommendations be made a part of any CPCN issued to the Company. The Commission imposed similar conditions on the storage facility operated by VGPC in its Final Order dated September 17, 1997, in Case No. PUE960093. These recommendations include the following: (1) *in situ* leakage testing and mechanical integrity tests should be performed on the proposed caverns; (2) maximum cavern pressures should not exceed the equivalent of .75 psi per foot of depth from the ground surface to the cavern roof unless the caverns are hydraulically interconnected. If they are interconnected, the maximum operating pressure should not exceed .70 psi per foot depth; (3) minimum cavern pressures should not fall below .30 psi per foot during the first three years of operation and rapid drops of pressure should be avoided. At the end of three years, the minimum cavern pressure may be reduced to .25 psi, if done in a gradual manner, i.e., less than 150 psi/day; (4) periodic ground level surveys should be conducted using the benchmark network; (5) a survey specialist should be engaged to review the existing survey procedures to improve the accuracy and repeatability of the present survey readings; (6) yearly gamma ray and caliper logging of all active wells should be conducted; (7) periodic sonar surveys should be used to monitor the dimension and shape of the caverns; (8) injection pressures, flow rates, and cumulative gas volumes should be monitored and recorded according to federal EPA requirements; and (9) the collected data should be integrated to develop a model of ground behavior on a yearly basis. (Ex. 11, at 1-2).

The geological and geo-technical properties of the Saltville site were considered in 1997, in the VGPC case. Dr. Merritt believes additional discussion on this point is not necessary. He believes the successful operation of VGPC's gas storage facility since that time, taking into consideration that the subsurface geological conditions are essentially the same at the proposed Phase I site, establishes the stability and tightness of the salt formation. Dr. Merritt generally concurs with Company witness Fernandez's conclusions and recommendations. However, Dr. Merritt believes it is not clear from the Application that the Company intends to follow them. Dr. Merritt recommends that the Company be required to follow the injection pressures and monitoring program recommended by Dr. Fernandez. Lastly, Dr. Merritt expressed his concern that if Phase II is begun, special attention should be given to ensure that there are no abnormal *in situ* rock stresses that could affect cavern stability and gas leakage. The Phase II site is located near Wells 1 – 4, which were responsible for a ground surface collapse that occurred in 1960. (*Id*. at Attachment 2).

Mr. Taylor's testimony addressed Saltville's request to capitalize interest during construction. He also addressed the accounting system that should be used by the Company, as well as certain pending Transfers Act and Affiliates Act applications related to this Application. (Ex. 12, at 1).

In its Application, Saltville indicated that it would use the same interest capitalization methodology currently used by VGPC. The Commission approved this methodology for VGPC in Case No. PUE980627. In that case, a weighted average of long-term debt based on VGPC's

consolidated capital structure was applied to a 13-month average of construction work in progress ("CWIP"). Gross capitalized interest was then reduced by earnings on funds held in reserve. For Saltville, Mr. Taylor believes interest capitalization should be based on the weighted average cost of capital. The Staff believes interest capitalization would be appropriate in this case; however, there should be some conditions placed on its use. Specifically, the inclusion of capitalized interest in the Company's rate base would be dependent upon annual earnings tests. Mr. Taylor cautioned Saltville that interest deemed to have been recovered need not be capitalized for future recovery, and there may be a time when the capitalization of interest would no longer be justified. (*Id*. at 2-3).

Mr. Taylor testified Saltville should not be restricted to using the ratemaking methodology for booking capitalized interest. However, if the Company uses a different methodology, the Company should be required to maintain sufficient records to track the resulting difference in plant in service, CWIP, accumulated depreciation, and accumulated deferred income taxes. In any filings made with the Commission, Mr. Taylor recommended the Company be required to present capitalized interest in a manner consistent with the Commission's ratemaking methodology to facilitate the Staff's review of the filing. Mr. Taylor further recommended that the Company be required to use the System of Accounts found within the Federal Energy Regulatory Commission Code of Federal Regulations, Conservation of Power and Water Resources, Number 18, Parts 1 to 399, revised as of April 1, 2001. (*Id*. at 3-4).

Mr. Taylor expressed his concerns relating to certain accounting issues affecting the Company. The two partners in the project, Duke Storage and NUI Storage, propose to share all operating costs on a fifty-fifty basis. Under the proposed operating agreement, once operations commence, the Company's share of O&M expenses would be based on a ratio of working gas capacity owned by or allocated to the Company to total working gas capacity at the Storage Facility. Mr. Taylor believes it is essential that comprehensive accounting records be maintained that reflect total cost, the ratio applied to total cost for booking purposes, and support for the derivation of the ratios utilized over time. Mr. Taylor recommends that final approval of a CPCN in this case be conditioned upon Commission approval of the Company's operating agreement and approval of an application to transfer assets from VGPC to Saltville. (*Id*. at 4-5).

Finally, Mr. Taylor testified that any revenues generated from the sale of salt removed from the caverns would be recorded as an offset to the operational costs of the evaporator plant. (*Id*. at 5).

Mr. Stevens' testimony addressed the Company's Application for a CPCN, and the reasonableness of the Company's proposed firm and interruptible rates. (Ex. 13, at 1).

Mr. Stevens discussed generally the criteria used by the Staff in evaluating Saltville's request for a CPCN. The Commission has approved two other natural gas storage facilities in Virginia, both of which were granted to, and are still held by, affiliates of Saltville. In 1995, the Commission granted a CPCN to Virginia Gas Storage Company ("VGSC") to own and operate an underground gas storage field in Early Grove, Virginia.[4] In 1997, the Commission granted a CPCN

[4] *Application of Virginia Gas Storage Company*, Case No. PUE940078, 1995 S.C.C. Ann. Rep. 330.

to VGPC to operate its underground gas storage facility in Saltville, Virginia.[5] The Staff relied on these two cases and other cases involving certificates for gas pipelines in reviewing Saltville's Application. The Staff viewed the two lines of cases as analogous in that both are wholesale supply sources for customers that are typically offered in competition with other sources of supply. In both instances, customers have the ability to price shop services to the extent that such services are available elsewhere. Mr. Stevens noted that granting a CPCN for storage or pipeline facilities does not entail assignment of a service territory. Often, such companies are located within the service territory of a local gas distribution company. Typically, the Commission has noted in the CPCN that it is a storage or pipeline facilities certificate not a distribution certificate. (*Id*. at 3-4).

The Staff applied the criteria set forth by the Commission in *Application of Virginia Electric and Power Company*, Case No. PUE860058 to determine whether a certificate is required for the public convenience and necessity in this case.[6] The Commission has applied these criteria to natural gas pipeline cases and has generally held that additional natural gas facilities increase available alternatives for natural gas customers, which is in the public interest.[7] (*Id*. at 4-5).

Mr. Stevens highlighted the role of gas storage in the operation of a gas utility. He stated that such storage is a crucial component in the operation of LDCs. Since the implementation of FERC Order No. 636, gas utilities have had to make their own arrangements for storage services rather than rely on the bundled merchant services of interstate pipelines. A gas storage capability can enhance LDCs' reliability during periods of peak demand or interruptions in the interstate supply of natural gas. It allows LDCs to manage fluctuating load requirements. Additionally, it allows LDCs to take advantage of seasonal differences in the price of natural gas. Mr. Stevens believes that underground natural gas storage will be a crucial component in the emerging natural gas-fired power generation market. The Staff is aware of at least five potential gas-fired power plants that have connected or will connect to ETNG's interstate pipeline. These power plants would have convenient access to the proposed Storage Facility. (*Id*. at 5-6).

Mr. Stevens explained that the Storage Facility is being developed concurrently with the Patriot pipeline. The joint development of the two projects is intended to create an energy-trading hub aimed at meeting the growing demand for natural gas in Southwest Virginia from existing natural gas customers and new gas-fired electric generation facilities. The Storage Facility will be connected to the Patriot pipeline, which in turn will be connected to Transco's interstate pipeline. This last connection would provide access to storage for Transco's customers located in Eastern and Northern Virginia. Customers served by ETNG and Transco would have access to the Storage Facility. (*Id*. at 10-11).

Mr. Stevens sponsored the DEQ's Coordinated Environmental Review into the record as an exhibit to his testimony. In addition to any plan preparation, approvals, coordination, permit applications, and other requirements with which compliance is required as a matter of federal, state,

---

[5] *Application of Virginia Gas Pipeline Company*, Case No. PUE960093, 1997 S.C.C. Ann. Rep. 363.

[6] These criteria were: (1) there was a need for the additional service within the time frame contemplated; (2) there were no suitable alternatives to the proposed construction; and (3) the facility's estimated cost, choice of technology, construction plans and proposed manner of carrying out the project were reasonable. *Application of Virginia Electric and Power Company*, Case No. PUE860058, 1987 S.C.C. Rep. 262.

[7] *Application of Virginia Natural Gas, Inc.*, Case No. PUE860065, 1988 S.C.C. Ann. Rep. 257.

or local law or regulation, DEQ made ten specific recommendations. These included: (1) comply with all the conditions of permits and approvals listed in the "Regulatory and Coordination Needs" section of the review; (2) commission an inventory of suitable habitat for the plant species documented in the vicinity of the proposed project by the Department of Conservation and Recreation; (3) reduce at the source, reuse, and recycle all solid wastes to the maximum extent practicable; (4) avoid stream and wetland impacts, or where such impacts are unavoidable, follow the recommendations in the review to minimize such impact; (5) commission a wetland delineation to identify the types and acreage of wetlands which may be affected by the proposed project; (6) avoid any work in the area of archaeological site 44SM131, or if such work is planned consult with the Department of Historic Resources to ensure compliance with Section 106 of the National Historic Preservation Act; (7) coordinate with the Department of Transportation regarding all construction work that involves any impact on roads; (8) protect trees not slated for removal in connection with the proposed project; (9) use pesticides or herbicides, if at all, in strict accordance with the manufacturers' recommendations; and (10) follow the pollution prevention recommendations discussed in the review. (*Id*. at 14-16).

Mr. Stevens next addressed the cost of service information supplied by Saltville. Since Saltville is a start-up company, the cost of service information supplied in its Application was based on pro forma financial requirements and estimated gas volumes. With the exception of the Company's proposed cost of equity rate, the Staff believes the proposed estimates of revenues and expenses are reasonable, even though they are not "cost-based" as is usually required in Commission cases. (*Id*. at 16-17).

Mr. Stevens reviewed the Company's proposed rate structure for firm and interruptible storage service. These rates are set forth below.

FIRM STORAGE SERVICE (FSS)

ITEM	**RATE**	**UNITS**	**DESCRIPTION**
Storage Capacity Charge			Paid on a monthly basis. Monthly payment is equal to the Storage Charge multiplied by Customer's firm MSQ divided by 12.
10-day withdrawal, 10-day injection	$4.91 to $6.65	$/MMBtu	
10-day withdrawal, 20-day injection	$3.27 to $4.42	$/MMBtu	
20-day withdrawal, 20-day injection	$2.47 to $3.18	$/MMBtu	
20-day withdrawal, 40-day injection	$1.64 to $2.22	$/MMBtu	
Storage Injection Charge	$0.05	$/MMBtu	Paid on a monthly basis. Payment is equal to the Storage Injection Charge Multiplied by the MMBtu Quantity injected by a Customer during a month.
Storage Withdrawal Charge	$0.05	$/MMBtu	Paid on a monthly basis. Payment is equal to the Storage Withdrawal Charge Multiplied by the MMBtu Quantity withdrawn by a customer during a month.

INTERRUPTIBLE STORAGE SERVICE (ISS)[8]

ITEM	RATE	UNITS	DESCRIPTION
Storage Capacity Charge	$1.50	$/MMBtu Per year	Paid on a monthly basis. Payment is equal to the monthly Storage Capacity Charge multiplied by the customer's maximum MMBtu quantity stored during the month.
Interruptible Park and Loan Charge	$0.0105	$/MMBtu	Payment is equal to the Interruptible Park and Loan Charge multiplied by Customer's max. storage quantity.
Storage Injection Charge	$0.05	$/MMBtu	Paid on a monthly basis. Payment is equal to the Storage Injection Charge Multiplied by the MMBtu Quantity injected by a Customer during a month.
Storage Withdrawal Charge	$0.05	$/MMBtu	Paid on a monthly basis. Payment is equal to the Storage Withdrawal Charge Multiplied by the MMBtu Quantity withdrawn by a Customer during a month.
Fuel Reimbursement			Included in the Storage Injection and the Storage Withdrawal Charges.

Id. at 18-19.

Mr. Stevens compared Saltville's rates with the rates of the two existing storage facilities located in Virginia and the interstate gas pipeline companies serving Virginia, and found Saltville's rates to be comparable. The Staff, however, believes the Company should be required to make an Annual Informational Filing after it has accrued one year of revenue and operating expense information, to validate the reasonableness of its rates. The Staff further supports the Company's use of a flexible rate schedule. The Company requested flexibility in its rate structure to compete against other providers of natural gas storage. Since gas storage is a wholesale supply service, Mr. Stevens believes any potential customers of the facility will have the ability to negotiate the lowest possible rate for themselves. Mr. Stevens indicated that the Staff would monitor the application and usage of the flexible rates to ensure that there are no abuses. If the Commission approves a revenue requirement that differs from the Company's proposed requirement, Mr. Stevens recommends that the final rates for each of the proposed service offerings be adjusted to reflect the percentage difference in the proposed revenue requirement and that approved by the Commission. (*Id*. at 17-22).

Mr. Stevens recommended no changes to Saltville's proposed Gas Tariff. However, he did recommend that the Company be required to obtain a separate CPCN for Phase II of the project.

[8]Per its request, Saltville's negotiated charge has been withdrawn from its proposed tariff.

The Staff believes that Phase II of the project is too premature to be addressed in this proceeding, and should be excluded from any CPCN issued to Saltville. Finally, if the Company deviates from the proposal set forth in its Application as it relates to the design or construction of the Storage Facility, its attendant facilities, or the routing of its associated pipeline, the Company should immediately advise the Commission of such changes. (*Id*. at 22-23, 26).

On cross-examination, Mr. Stevens indicated that he would have no problem with adding language in the Company's tariff clarifying that Saltville would bind itself to the rates and terms of service that it negotiated with its customers. (Tr. at 217).

Mr. Maddox's testimony addressed the appropriate capital structure, cost of equity capital, and overall cost of capital for Saltville. His testimony also addressed the Staff's recommendation that any CPCN include a sunset provision. Based on the Company's proposed hypothetical capital structure consisting of 35% equity and 65% debt, Mr. Maddox supports an overall cost of capital range of 9.40% - 9.75%. This cost of capital range incorporates a cost of equity range of 12.00% - 13.00%. Mr. Maddox recommends that the 12.50% midpoint of the cost of equity range be used for determining the Company's revenue requirement. (Ex. 16, at 1).

Mr. Maddox examined Saltville's relationship with its corporate parents with respect to the financial, technical, and managerial resources they provide. He generally believes this relationship and the prospect for storage demand in the area make the project financially viable. While Saltville is a start-up company, Mr. Maddox does not believe Saltville is the type of stand-alone company that warrants a small company adjustment to its cost of equity. (*Id*. at 2-3).

Although the Staff prefers to use the capital structure of the entity obtaining the financing from the capital markets in its analysis, in this case it used a hypothetical 35% equity and 65% debt capital structure. This was necessitated because of the unique arrangement being used to develop the project. The percentages of equity and debt are based on projections of expected capital investment by Saltville's corporate parents. (*Id*. at 3-6).

The Staff accepted the Company's proposed long-term debt rate of 8.00%. It found that the Company would have access to debt financing through its affiliate relationships. (*Id*. at 6).

To determine the appropriate cost of equity capital for Saltville, Mr. Maddox looked at a proxy group of sixteen gas distribution companies and six diversified gas companies. Using a discounted cash flow analysis, Mr. Maddox calculated a cost of equity capital range for the proxy group of gas distribution companies of 8.05% to 15.08%, with an average of 11.69%. He calculated a cost of equity capital range for the diversified gas companies of 11.02% to 14.42%, with an average of 13.10%. Mr. Maddox's *ex ante* risk premium analysis resulted in a cost of equity estimate of 10.17%. His average CAPM for the gas distribution companies was 9.9%, and 10.5% for the diversified gas companies. Based on these results, Mr. Maddox found the appropriate range for Saltville's cost of equity to be 12.00% - 13.00%. His recommended cost of equity is the midpoint of the range, 12.50%. Since no reward/penalty policies have been developed for gas companies that link performance to the allowed return on equity, Mr. Maddox could not justify a return above or below the midpoint for determining the revenue requirement. (*Id*. at 7-20).

Mr. Maddox agrees with the Company's use of a 40 basis point positive leverage adjustment. The Staff has supported, and the Commission has adopted, similar adjustments in Case Nos. PUE900028, PUE940054, and PUE960227, for Virginia Natural Gas Company when it was a subsidiary of Consolidated Natural Gas Company. This case, however, is the first case in which the result was a positive adjustment. (*Id*. at 19-20).

Mr. Maddox disagrees with Saltville witness Hanley's use of a small company adjustment to the cost of equity. He believes the Company's size cannot be considered solely in the context of the dollar amount of capital invested. According to Mr. Maddox, this argument would have merit if Saltville were a stand-alone company, but it is not. It has the ability, through its corporate parents, to access the capital markets at more favorable terms than a stand-alone company. Its parents will hold Saltville's stock. Saltville is not a publicly traded company that has to sell its stock to investors to raise capital. Mr. Maddox further noted that the betas for all of the companies used in his and Mr. Hanley's DCF analysis fall significantly below one. Additionally, Mr. Maddox believes applying a small company premium adjustment based on 5,700 small companies in an Ibbotson study to a regulated utility company is flawed. In the past, the Commission has allowed a small company adjustment only where there has been negative growth in service territory and/or difficulty raising capital due to a company's size. Neither condition is present in this case. For these reasons, Mr. Maddox believes the use of a small company adjustment in this case would be improper. (*Id*. at 21; Tr. at 258-64).

Mr. Maddox believes it would be prudent for the Commission to include a sunset provision in any CPCN issued to Saltville. This type of provision is necessary to ensure that the Commonwealth's valuable but limited resources necessary for the public convenience (i.e., rights-of-way, service territory, energy storage or production sites) are tied up by an entity that, for whatever reason is not willing or able to complete the project. The Staff recommends two sunset provisions in this case. First, if the completion of Phase I of the project extends beyond December 31, 2007, Saltville should be required to request additional authority from the Commission to continue development of the project. Second, lack of development or operation of the facility would cause any Commission issued CPCN to lapse on December 31, 2007, unless Saltville timely files a petition requesting extension of its CPCN, and demonstrates good cause for the delay. (*Id*. at 22-23).

Mr. Maddox's analysis is summarized in the table below:

Saltville Gas Storage Company, LLC
Summary of Methods and Results
for Estimating the Cost of Equity

	Without Leverage Adjustment	With 40 Basis Point Leverage Adjustment
DCF Analyses		
Gas Distribution Companies		
Average Low-High Range	11.28% - 12.10%	11.68% - 12.50%
Midpoint	11.69%	12.09%
Diversified Gas Companies		
Average Low-High Range	12.66% - 13.54%	13.06% - 13.94%
Midpoint	13.10%	13.50%
Risk Premium		
Ex Ante		
1980 – 1993 Relationship	10.20%	10.60%
CAPM		
Gas Distribution Companies	9.90%	10.30%
Diversified Gas Companies	10.50%	10.90%
Cost of Equity Recommendation		
Range		12.00% - 13.00%
Midpoint		12.50%

Ex. 16, at Schedule 14.

On cross-examination, Mr. Maddox agreed that the Company is projecting an average return on rate base of –0.07% for 2002; 1.31% for 2003; 3.11% for 2004; 5.95% for 2005; 8.76% for 2006; and an average of 3.67% for its first five years of operation. Based on the Company's projections for the first three years of operation, Mr. Maddox agreed that it appeared the Company did not have a reasonable opportunity to earn anywhere near the 12.5% total cost of capital he was recommending in this case. Mr. Maddox believes that, if years 2007 and beyond were factored into the analysis, the Company would reach or exceed the 12.5% return on total capital. (Tr. at 266-69).

In response to questions from the bench, Mr. Maddox testified that during a recessionary period capital costs tend to go up because there is less demand for investment. However, investors view utility companies as safe havens. They are perceived to be less risky than the market in general. Given the current recessionary environment, an investor's expectation of returns is lower, but there exists an element of risk that is still associated with the investment. Mr. Maddox distinguished between cost of equity for ratemaking purposes, which looks at a long-term horizon, and an investor's expectations on return on equity, which may have a shorter horizon. (Tr. at 272-76).

DISCUSSION

After such a lengthy summary of the facts, there should be a number of issues in controversy in this case. Actually, there is only one major issue in controversy, the cost of equity capital, and several minor issues such as Dominion Greenbrier's objection to the issuance of the CPCN and its concern over brine disposal.[9] Public Service expressed concerns with Saltville's proposed negotiated charge in its Interruptible Storage Service tariff. The Company agreed to remove the proposed charge from its tariff and work with Public Service on acceptable language that it will file with the Commission after it is certificated. Saltville has generally agreed to comply with all the other recommendations raised in this case.

Certificate of Public Convenience and Necessity

a. Criteria Established by the Commission:

(1) There is a need for additional natural gas storage service within the time frame contemplated by the Company;

(2) The estimated cost of constructing the Storage Facility, the choice of technology, construction plans, and the proposed manner of carrying out the project must be reasonable; and

(3) No suitable alternative to the project exists.[10]

In its post-hearing brief, Dominion Greenbrier questions whether the first and second criteria have been met. With respect to the first criterion, Dominion Greenbrier cites the lack of commitments by any customers to use the Storage Facility. Dominion Greenbrier argues Saltville has failed to prove "convincingly" the need for the facility within the proposed time frame. With respect to the second criterion, Dominion Greenbrier argues there is considerable lack of definitive knowledge on the suitability of the caverns for gas storage and Saltville's brine disposal plans appear to be inadequate. (Dominion Greenbrier Post-Hearing Brief at 2-13).

Saltville has met its burden of establishing the need for the Storage Facility. Saltville witness Riha testified that approximately 30%, or 1.875 Bcf, of the total capacity planned for Phase I has been subscribed. The following customers, through their transportation contracts with ENTG, have subscribed to the Patriot extension and designated Saltville as the receipt point of their gas: NUI Energy Brokers (25 MMcfd); Duke Energy Wythe, LLC (20 MMcfd); Henry County Power (50 MMcfd); Duke Energy Murray (50 MMcfd); and Public Service (15 MMcfd). Mr. Riha also identified the LDCs and power generators that have expressed interest in storing gas at the facility. These include: Roanoke Gas Company; Southwestern Virginia Gas Company; United Cities Gas Company; Competitive Power Ventures, Inc.; and Constellation Energy. Saltville

[9] At the hearing, counsel for Dominion Greenbrier indicated in his opening statement that it had no objection to the issuance of a CPCN to Saltville. (Tr. at 23). In its post-hearing brief, Dominion Greenbrier raised for the first time its objection to the issuance of the CPCN.

[10] *See, Virginia Electric and Power Co.*, Case No. PUE860058, 1987 S.C.C. Ann. Rep. 262.

intends to market its services to these companies after the Commission approves its rates and services. Saltville does not anticipate that it will have excess storage capacity.

Staff witness Stevens testified that gas storage is a crucial component in the operation of LDCs. He found that a gas storage capability (1) could enhance LDCs' reliability during periods of peak demand or interruptions in the interstate supply of natural gas; (2) allows LDCs to manage fluctuating load requirements; and (3) gives LDCs the opportunity to take advantage of seasonal fluctuations in the price of natural gas. Mr. Stevens further testified that underground natural gas storage would be a crucial component in the emerging merchant gas-fired generation market in Virginia. At least five potential gas-fired power plants may locate along interstate pipelines that will have access to the Storage Facility.

The threshold questions regarding need are whether the natural gas utility infrastructure and the citizens, individual and corporate, of Virginia will benefit from the Storage Facility. The answer on both points is yes. Virginia is geographically removed from the primary source of supply for natural gas, the Gulf Coast. Although *force majeure* interruptions in the interstate supply of natural gas have been infrequent, the ability to store large quantities of natural gas locally appears to be prudent planning for such a contingency. One need only look at the federal government's strategic petroleum reserve as an example of similar planning for the possible interruption of petroleum supplies. The Storage Facility will also help alleviate interstate pipeline capacity problems. During winter peak demand days, there may be insufficient capacity on the interstate pipeline system to meet the demand of those customers farthest from the source. The Storage Facility would allow for upstream injections of natural gas to meet this demand, and would create a local supply of natural gas that could be traded to meet critical natural gas demand in this Commonwealth.

The Storage Facility will also benefit the individual and corporate citizens of Virginia. For the first time, LDCs in Southwest Virginia will have the ability to manage fluctuating demand requirements, and make strategic purchases of natural gas at off-season rates. Efficiencies gained in this process would inure to the benefit of the LDCs' customers, both residential and commercial. Large quantities of natural gas supply in the region and the ability to deliver that gas should stimulate business and manufacturing growth in the region. The gas-fired merchant generation industry in the region will experience the same benefits by being able to manage fluctuating demand requirements and make strategic purchases of natural gas. An additional point was not considered at the hearing. A natural gas-fired generation plant would not need to switch to an alternative fuel during periods of peak demand, an economic and environmental benefit. Through gas storage, those facilities could avoid the need to operate on more costly, and more polluting, fuel oil.

Considering the foregoing benefits, I find Saltville has adequately established the need for this type of natural gas storage facility in Virginia.

Dominion Greenbrier also expressed its concern that Saltville does not know the geometry of the caverns, whether the caverns will be suitable for natural gas storage, or how much capacity will be available. At the hearing, Dominion Greenbrier attempted to develop its theory of the case through cross-examination of Saltville's expert witnesses and the Staff's expert witness. It did not put on its own expert witness to rebut either Saltville's or the Staff's evidence. The danger in

pursuing such a tactic is that the resulting record may not support your theory of the case. Such is the case here. The overwhelming evidence is that salt caverns may be safely and efficiently developed into a natural gas storage facility.

The expert witnesses, Dr. Fernandez and Mr. Allen for Saltville and Dr. Merritt for the Staff, all testified that salt caverns are well suited for development into gas storage facilities. In order to do so, certain sonar tests must be conducted to determine the size and shape of the caverns, and then certain operating parameters must be placed into effect when the caverns become operational. Both Drs. Fernandez and Merritt made recommendations concerning sonar testing and the safe operation of the storage caverns. Saltville has agreed to comply with those recommendations. One need only look next door at VGPC's facility as proof that salt caverns may be converted to a natural gas storage facility and operated safely. VGPC will be bringing its expertise in the operation of natural gas storage caverns to Saltville's facility.

Dominion Greenbrier also raised the specter that Saltville may not have the ability to dispose of all the brine produced from development of the storage caverns. The speed at which Saltville can develop the storage caverns depends on its ability to dispose of brine. Saltville initially considered a two-pronged approach to brine disposal, an evaporator plant and a brine disposal well. Saltville abandoned its plans to use the well after initial tests concluded the well would not be suitable for brine disposal. Dominion Greenbrier's concern is that Saltville has not accounted for the well's lost brine disposal capacity, approximately 2 million barrels, and its inability to dispose of brine could impact Saltville's customers and have unknown environmental impacts.

VGPC currently operates a 100 gpm brine evaporator plant and will continue to operate that plant for Saltville through 2003. Saltville plans to construct a $14.74 million brine evaporator plant with a rated capacity of 400 gpm. The new plant is scheduled to be operational in October 2003, at a capacity of 140 gpm. Saltville intends to increase the capacity to 180 gpm by October 2004. The rate may be increased to 400 gpm based on the ability to market the dry salt produced. (Ex. 4, at 7-9).

In order to meet its Phase I completion date of October 2007, Saltville will have to dispose of approximately 10.5 million barrels of brine between now and then. There are really only two options available to Saltville. First, it could keep the current evaporator plant in service beyond 2003, and operate both of the plants simultaneously for some period of time. Second, it could operate its new evaporator plant at a higher capacity from its in-service date. With either option, it is clear that brine disposal may have an impact on the viability of the project and the ability to complete Phase I of the project by October 2007. Dominion Greenbrier recommends that the Commission condition Saltville's CPCN to require it to report to the Staff on an annual basis during Phase I of the project the progress of its brine disposal. With the exception of several modifications to the reporting format, I agree with Dominion Greenbrier's recommendation that the Commission should have the ability to monitor the situation. Accordingly, I find that the Commission should monitor Saltville's brine disposal throughout Phase I of the project because of its impact on the viability and timely completion of Phase I of the project. I recommend that any CPCN issued to Saltville include a requirement that it file a report with the Staff on or before January 31, 2003, and annually thereafter, identifying the amount of brine actually processed during the preceding calendar year, the brine on hand in the retention ponds at the end of the calendar year, the remaining

space available in the retention ponds, a projection of the brine to be produced during the upcoming calendar year from cavern development, a projection of the amount of brine to be processed during the upcoming year, and the proposed method of processing.

Considering the foregoing, I find Saltville has met all three criteria for the issuance of a CPCN. I recommend the Commission issue Saltville a preliminary CPCN allowing it to test, develop, construct, maintain and own the Storage Facility. The Commission should defer issuing Saltville its final CPCN allowing it to operate the Storage Facility until after the filing of certain studies, operations manuals, and engineering plans and specifications with the Commission, as detailed later in this Report.

b. Phase II of the Storage Facility should be excluded from Saltville's CPCN.

Based on concerns raised by the Staff, Saltville has no objection to its CPCN being limited to Phase I of the project. I agree with the Staff that there are too many uncertainties associated with Phase II of the project. The greatest obstacle is the length of time between the two phases of the project and what may occur during that period of time. Saltville has agreed that it will file a separate application with the Commission for Phase II, when needed. I recommend that the CPCN issued by the Commission specifically state that it is limited to Phase I of the Storage Facility project, and that Phase II is specifically excluded from the CPCN.

c. Sunset Provisions should be included in the CPCN.

In his testimony, Mr. Maddox recommended that two sunset provisions be included in Saltville's CPCN. First, if completion of Phase I of the project extends beyond December 31, 2007, Saltville should be required to request additional authority from the Commission to continue development of the project. Second, if Saltville fails to develop or operate the Storage Facility, its CPCN would lapse on December 31, 2007, unless Saltville timely files a petition with the Commission requesting an extension of its CPCN, and demonstrates good cause for its delay. Saltville has no objection to its CPCN containing these sunset provisions. I recommend that the CPCN issued by the Commission contain the two sunset provisions set forth above.

Management Control

The questions of adequate management control, and who should rightly hold the CPCN for the Storage Facility surfaced during the hearing and were raised in the Staff's Post-Hearing Brief. (Staff Post-Hearing Brief at 19-24).

This case was overly complicated by the unusual arrangement needed to develop the project. At times in the witnesses' testimony, it was difficult to follow "who was on first."[11] Although VGPC currently operates a salt cavern natural gas storage facility in the same geographic area for which Saltville seeks a CPCN, it does not have the right to unilaterally develop the remaining salt caverns in its certificated area into natural gas storage caverns. In 1996, VGPC entered into a transfer agreement with Tennessee Energy Resources Company that permitted VGPC to develop

[11] *See*, Tr. at 224.

the caverns it now operates, caverns 16 and 20. The agreement provided that subsequent caverns would be developed in a joint venture between the parties. Duke Energy is the successor in interest to that agreement, having purchased Tennessee Energy Resources Company's parent. To form the joint venture, the parties in interest chose a limited liability company ("LLC") with two members. Duke Energy created Duke Storage and VGPC's parent created NUI Storage to be the two members of the Saltville LLC. As part of its member contribution, Duke Storage will contribute $16.3 million in cash and NUI Storage will contribute, in-kind, $16.3 million in land, facilities, and equipment. The remaining development costs for the Storage Facility will be shared equally by Duke Storage and NUI Storage.

To further complicate the matter, Saltville entered into an operating agreement with VGPC to operate the Storage Facility. This was done to leverage VGPC's expertise in managing the day-to-day operations of a salt cavern natural gas storage facility and achieve certain economies of scale. The Commission approved the operating agreement on March 12, 2002.[12] Saltville's management committee, which consists of an equal number of representatives from Duke Storage and NUI Storage, will establish the policies under which VGPC must conduct day-to-day operations at the facility. Those policies have not yet been promulgated.

The Staff argues that § 56-265.1(b) of the Code of Virginia (the Utilities Facilities Act) defines a "public utility" as any company that owns or operates a storage facility for natural gas in the Commonwealth of Virginia, and § 56-265.3 A of the Code of Virginia requires a public utility to obtain a CPCN from the Commission before providing such service. The Staff applied the plain meaning of "furnish" and concluded that VGPC is acting as a public utility as defined by the statutes. Taken literally, the Staff's reading of the two statutes could require every contract operator, or every subcontractor working for a public utility, to obtain a CPCN. I do not believe the statute was intended to be that far reaching. If a public utility exercises supervision and control over its contract operator, or subcontractors, then it should be the only entity required to obtain a CPCN. Therein lies the question: Does Saltville supervise and control its operating manager? If not, VGPC should be required to obtain a CPCN.

The Staff also argues that, in lieu of VGPC obtaining a CPCN, Saltville should be required to provide proof that: (1) it will obtain and maintain control of the Storage Facility; (2) it will obtain all the required DEQ and EPA permits to operate the Storage Facility; (3) it will take responsibility for the day-to-day operations and safety at the Storage Facility; and (4) it has sufficiently defined its management policies so that it is clear Saltville controls the Storage Facility.

Saltville responded to the Staff's argument by stating that VGPC is merely acting as an agent for Saltville. VGPC is the operating manager with no vested interest in the facility, and no exclusive right to remain the operating manager of the facility. Additionally, in the order approving the operating agreement, the Commission stated: "VGPC shall only serve as the Operating Manager, and that [Saltville] shall be the certificate holder for the facilities." *Application of Virginia Gas Pipeline Company and Saltville Gas Storage Company, L.L.C., For approval of a transaction between affiliates*, Case No. PUA010076, D.C.C. No. 020320084 (March 12, 2002).

[12] *See, Application of Virginia Gas Pipeline Company and Saltville Gas Storage Company, L.L.C., For approval of a transaction between affiliates*, Case No. PUA010076, D.C.C. No. 020320084 (March 12, 2002).

I share the Staff's concern. Under the terms of the operating agreement, VGPC is given wide latitude in how it may operate the Storage Facility. Other than Saltville's management committee and its "policies," it appears that VGPC was given free reign to operate the Storage Facility as long as it acts in a prudent manner and in the best interests of Saltville.[13] In order to confirm Saltville's ultimate control over the operation of the Storage Facility, the Commission should require Saltville to file a copy of its management committee's "policies" prior to the issuance of a final CPCN. It should be apparent in those policies that the management committee exercises supervision and control over the operations of Saltville's operating manager. Additionally, Saltville should be required to confirm that both Saltville and its operating manager have all the necessary permits to operate the Storage Facility. Saltville stated that VGPC has all the permits it needs, but did not state whether Saltville had all the permits it needed.[14] On this record, it is unclear which permits have to be held by the owner of the facility, and which permits have to be held by the contract operator of the facility. Saltville should be required to file a list of the permits required to construct, own and operate the facility and identify which entity, Saltville or VGPC, is required to hold the permit.

Cost of Capital/Accounting Issues

a. Cost of Equity Capital.

The cost of equity capital is the most contentious issue in this case, with Saltville and the Staff arguing that their recommendation is far superior to the other's. As the Commission is aware, the determination of the cost of equity capital is an inexact science. Analysts use various models in formulating their recommendations, such as the Discounted Cash Flow, Risk Premium, Capital Asset Pricing, and Comparable Earnings. In the end, their final recommendation is nothing more than an educated guess. With that said, it is impossible to make an "apples-to-apples" comparison of the methodologies used by each of the analysts in this case. Each used different assumptions and data sources to derive his recommended cost of equity capital. There is, however, one notable difference in the approaches taken by the two analysts. Saltville witness Hanley made a business risk, or small company, adjustment where Staff witness Maddox did not.

Mr. Hanley calculated a 15.32% cost of equity capital. Since the Company requested only a 15.00% cost of equity capital in its Application, Mr. Hanley argued the 15.00% cost of equity capital requested by the Company is conservatively reasonable, especially considering certain business risks that were not factored into his analysis. On the other hand, Mr. Maddox calculated a 12.50% cost of equity capital. The primary difference between the two is the 1.50% - 2.00% business risk adjustment made by Mr. Hanley. Mr. Maddox believes the use of such an adjustment is improper.

In his rebuttal testimony, Mr. Hanley recalculated the cost of equity capital using Mr. Maddox's data sources, two additional companies in the diversified gas company proxy group, and Mr. Maddox's methodology, except for certain adjustments he argued Mr. Maddox should have

[13] *See*, Exhibit 1, at Attachment 2, paragraph 2.1.

[14] In his direct and rebuttal testimony, Mr. Ferguson stated VGPC and Virginia Gas have all the permits necessary for the operation of an underground natural gas storage facility. No mention was made of Saltville and the permits it may need to operate an underground natural gas storage facility. *See*, Ex. 4, at 10-11 and Ex. 19, at 7.

made. This analysis resulted in an indicated cost of equity capital of 14.45%. Mr. Hanley continued to make a business risk adjustment. He believes the resulting 14.45% cost rate for equity capital is extraordinarily conservative. With this revised cost of equity capital, the majority of the difference between the two recommendations may be attributed to the business risk adjustment.

I find Saltville's argument for a business risk adjustment persuasive. This case is distinguishable from the cases where the Commission permitted the small company risk adjustment in the past. Saltville is a start-up company and the other companies had been established for some time. The criteria applied by the Commission in those cases, negative growth in service territory and/or evidence of difficulty in raising capital due to a company's size, should not apply in this case. The start-up nature of Saltville's business makes it inherently more risky than a small utility company that has been in business for forty years, with an established customer base, seeking financing for system upgrades to serve those customers. If completed, the Saltville project will strengthen the natural gas utility infrastructure in Virginia, and provide Virginia LDCs and gas-fired generation companies with greater flexibility in managing their supplies of natural gas. These benefits should ultimately trickle down to the consumers of natural gas and electricity in Virginia. The Commission should ensure that regulated start-up companies have a reasonable opportunity to succeed, and that they are not artificially constrained in doing so by a cost of equity capital that is set too low.

In looking at the reasonableness of Saltville's return on equity capital, the Commission should focus on the expectations of the average investor, without regard for Saltville's corporate parents. Saltville's corporate parents should be entitled to the same return on their equity investment as any other investor making an investment in a similar project. Saltville is proposing to spend upwards of $90 million to develop several large holes in the earth into natural gas storage caverns. Although the leading experts in the field have opined that salt caverns make ideal natural gas storage facilities, there are a multitude of problems that may go wrong during the development of this project. The Commission should account for this risk in establishing the Company's return on equity capital.

The Commission should also consider the long-term horizon for this project. Phase I of the project will not be completed until 2007. Saltville's own projections using a 15.00% return on equity capital show a 10.45% return on rate base in 2007, and an average return on rate base of 4.80% for the period 2002 through 2007. The long-term nature of this project makes it inherently more risky to investors. It will be 2008, and beyond, before investors have a reasonable expectation of earning anything near 14.45% on their equity investment. Investors typically require a higher rate of return on their investment to compensate for committing their capital over a longer period of time.

At least in the short term, the Commission should not be concerned that Saltville's rates may be excessive. Saltville's business can best be characterized as that of a wholesaler. Its customers will be sophisticated LDCs or gas-fired power generators. Under Saltville's proposed rates, these companies have the ability to negotiate a favorable rate or they can simply decide not to use Saltville's facility and continue to receive their natural gas through their existing supply channel. No one is required to use Saltville's storage facility. Market forces will determine who will or will not use the facility. The Commission has the ability to review Saltville's rates after it has

accumulated one year of operating data. Saltville has agreed to file an Annual Informational Filing and a FERC Form 2 with the Commission. At that time, the Commission can use the data in these filings to review Saltville's financial condition and determine whether Saltville's rates are excessive or inadequate.

For the reasons set forth above, I find Saltville should be entitled to a business risk, or small company, adjustment in determining its cost of equity capital. I further find Mr. Hanley's revised cost of equity capital of 14.45% is reasonable. Mr. Hanley's adjustments to the Staff's methodology produce a result that is eminently fair for the Company.

b. Interest Capitalization.

Both the Staff and the Company agree that Saltville should be permitted to capitalize interest. Saltville would use the methodology approved by the Commission in *Virginia Gas Pipeline Co*., Case No. PUE980627, 1999 S.C.C. Ann. Rep. 443.

Considering the long development timeline for this project, until 2007, I find it reasonable that the Company should be permitted to capitalize interest.

c. Annual Informational Filing.

The Staff recommended that Saltville make an Annual Informational Filing after one year of operational data has been accumulated. The Staff would use the filing to review the reasonableness of the Company's storage rates. In his rebuttal testimony, Mr. Curia stated Saltville has no objection to making the filing with the Staff.

I find this recommendation is reasonable. The Commission should require Saltville to make an Annual Informational Filing.

d. FERC Form 2.

The Staff recommended that Saltville file a FERC Form 2 within 120 days of the end of the Company's fiscal year. Saltville did not address this recommendation in its rebuttal testimony. The FERC Form 2 along with the Company's Annual Informational Filing would be used by the Staff to monitor Saltville's financial condition.

I find this recommendation is reasonable. The Commission should require Saltville to make the FERC Form 2 filing.

e. FERC System of Accounts.

The Staff recommended that Saltville maintain its accounting records in accordance with the FERC System of Accounts (Conservation of Power and Water Resource, Number 18, Parts 1 to 399, revised as of April 1, 2001). This would facilitate any Staff audit of the Company's accounting records. In his rebuttal testimony, Mr. Curia stated Saltville's accounting records would comply with the FERC System of Accounts.

I find this recommendation is reasonable. The Commission should require Saltville to maintain its accounting records in accordance with the FERC System of Accounts.

f. Application to transfer utility assets from VGPC to Saltville.

Saltville has no objection to a requirement that it file an application under the Utility Transfers Act to transfer the facilities outlined herein from VGPC to Saltville as a condition of obtaining a CPCN.

I find this recommendation is reasonable. The Commission should require Saltville to file a joint application with VGPC for approval to transfer the utility assets.

Tariff

Public Service raised concerns about Saltville's proposed tariff, specifically the Company's proposed negotiated charge in its Interruptible Storage Service tariff and whether the Company would be able to provide its customers sufficient certainty in their rates and terms of service. The concerns raised by Public Service and the Staff prompted Saltville to request at the hearing that its proposed negotiated charge be withdrawn from its tariff. At the hearing, Saltville indicated that it was willing to consider clarifying its tariff to make its intentions more clear.

Subsequent to the hearing, representatives of Saltville and Public Service met and discussed possible changes to the tariff. Both parties have agreed that changes would be appropriate; however, Saltville should make such changes in a filing subsequent to the Commission issuing the Company a CPCN. Saltville has agreed make such filing. Public Service requests that the Commission enter no order in this case that would prejudice Saltville's right to make, and the Commission to consider, such a tariff filing. (Public Service Post-Hearing Brief at 3).

I find Saltville's proposed Firm Storage Service and Interruptible Storage Service charges, as modified at the hearing, are reasonable. The proposed charges offer potential customers a wide variety of storage options at varying charges, including the option of negotiating charges for certain Firm Storage Service within a range of rates proposed by the Company. I further find that Saltville should be afforded an opportunity after it is issued a preliminary CPCN to file amendments to its tariff to address the concerns raised by Public Service and the Staff.

Geo-technical/Engineering

a. Cavern Testing.

Before any construction work can be done on the proposed gas storage caverns, Saltville will have to conduct *in situ* leakage testing and mechanical integrity tests on all of the caverns. Additionally, sonar surveys will have to be conducted to determine the size and shape of the caverns, and whether any of the caverns are interconnected. These tests will determine the suitability of the caverns for natural gas storage, and the operating parameters needed to operate safely the caverns as a gas storage facility.

The Commission's paramount duty in this case is to ensure the safety of the citizens of this Commonwealth. The Commission should require Saltville to provide the cavern test results to the Staff, for an independent review of the results by Dr. Merritt, the Staff's geo-technical expert. When Phase I is completed, it is estimated that the Storage Facility will hold approximately 6.2 Bcf of natural gas. There was little discussion in the record of the types of problems that may occur at such a facility. It is, therefore, incumbent upon the Commission to take all appropriate steps to confirm that the caverns are suitable for gas storage, and an independent review of the test results is certainly a reasonable step in that direction.

b. Operating Parameters and Continued Operations Monitoring.

Both Dr. Fernandez, on behalf of Saltville, and Dr. Merritt, on behalf of the Staff, made recommendations concerning the operating parameters and continued operations monitoring required at the facility. In his rebuttal, Mr. Ferguson testified that Saltville intends to comply with Dr. Fernandez's recommendations whether or not the recommendations are imposed as conditions in Saltville's CPCN. Dr. Merritt believes Saltville should be required to follow the injection pressures and monitoring program recommended by Dr. Fernandez. He summarized those recommendations in his testimony.[15] It was not clear to Dr. Merritt from the Application that the Company intended to follow Dr. Fernandez's recommendations. In the past, the Commission included similar conditions in the CPCN issued to VGPC to operate its storage facility.

I agree that the operating parameters and continued operations monitoring recommendations should be made a part of Saltville's CPCN. This will avoid any possible confusion in the future on the requirements necessary to safely operate the facility.

Other Issues

a. Compliance with DEQ's Coordinated Environmental Review.

In his rebuttal testimony, Mr. Ferguson testified Saltville retained an environmental consulting firm that has completed an inventory of rare and endangered plant species, which will be provided to the Department of Conservation and Recreation, and a wetlands survey of the site, which found one wetland area where no future construction is proposed. Saltville's consultant found six wetlands sites along the proposed natural gas pipeline corridor. These sites will be addressed in a Joint Permit Application filed with the Army Corps of Engineers. Saltville intends to enter a Memorandum of Understanding with the Department of Historic Resources and the Army Corps of Engineers regarding construction in and around the archaeological site on the facility. Mr. Ferguson stated Saltville intends to comply with DEQ's remaining recommendations.

Since some of the recommendations contained in DEQ's Coordinated Environmental Review may not be independently enforceable by the agency making the recommendation, I find Saltville's preliminary CPCN should contain a condition that it comply with the recommendations found in DEQ's Coordinated Environmental Review.

[15] *See*, Ex. 11, at 1-2.

b. The Storage Facility.

(1) Operator Qualification Manual, Operations and Maintenance, Emergency, Anti-Drug, and Alcohol Misuse Manuals should be revised to reflect that Saltville is the owner and VGPC is the operator of the storage facility.

Mr. Hotinger expressed his concern that the owner and operator of the Storage Facility were not separately identified in the various manuals Saltville filed with the Commission's Staff. In some cases, certain critical manuals were not filed with the Staff for review.

Mr. Ferguson stated Saltville would address the Staff's concern after the Commission approved the operating agreement between Saltville and VGPC. The Commission approved that agreement on March 12, 2002. There was no mention in Saltville's Post-Hearing Brief whether the necessary corrections to the manuals have been made.

The Staff's concern is that Saltville did not separately identify the owner of the facility from the operator of the facility. Saltville has done a poor job of distinguishing its role in the operation from VGPC's role. For this reason, a preliminary CPCN is entirely appropriate in this case. A preliminary CPCN allows Saltville to commence development of the project and correct, and in some cases initially file with the Commission, the manuals it needs to own and operate the facility. The Commission should require Saltville to make the corrections to the manuals already filed with the Commission, and further require Saltville to file its Operator Qualification Manual.

(2) Pipeline Design Standards.

In his testimony, Mr. Hotinger recommended that the entire natural gas pipeline serving the Storage Facility be constructed to meet the requirements of a Class 2 location, although only a small percentage of the pipeline route is presently located in a Class 2 area. The change would require the use of thicker gauge pipe in the construction of the pipeline. This recommendation was made for a number of reasons: to allow the pipeline to operate at a lower MOAP, reducing the stress level on the pipeline; to meet the minimum requirement for a Class 2 area should the class location ever change; and to eliminate the requirement to replace pipe or lower the pipeline's operating pressure if the class location changes in the future.

Mr. Ferguson agreed with Mr. Hotinger that Saltville should reconsider potential growth near the pipeline and the possibility that the class location along the pipeline route might change. He stated Saltville's engineers would thoroughly review the pipeline corridor to see if it would be prudent to increase further the percentage of Class 2 pipe based on the probability of potential growth near the corridor. Mr. Ferguson conditioned the Company's position by stating Saltville would consider the economic impact of such a change.

There is no evidence in the record of the cost differential that would be incurred to increase the thickness of the pipe to meet the requirements of a Class 2 area. At present, the design of the pipeline meets the minimum requirements of the Commission's pipeline safety regulation. Beyond cajoling Saltville to take a serious look at upgrading the thickness of the pipe used in the pipeline, the Commission has no authority to unilaterally mandate such an upgrade. Saltville should,

however, carefully weigh the economics of any decision it makes. Upgrading the pipe before it is placed in the ground is less costly than digging up and replacing pipe if the class location changes. Further, if Saltville had to operate the pipeline at reduced operating pressures, future revenues would be impacted. Saltville is required under the Commission's pipeline safety regulations to monitor the pipeline to identify any changes needed in the class locations and require either system upgrades to meet changed class locations, or changes in the operating parameters of the pipeline.[16]

Mr. Hotinger also recommended that the Company provide the Staff with the comprehensive specifications for all portions of the pipeline facilities at least 30 days prior to the commencement of construction. Mr. Ferguson stated that Saltville would meet this requirement. I agree that the Staff should be provided sufficient time to review the final plans and specifications.

c. Certificated Service Territory.

Saltville's proposed certificated service territory overlays portions of VGPC's existing certificated service territory.[17] VGPC does not want to abandon portions of its service territory unless Saltville receives a CPCN for all of its requested territory.

For the reasons set forth herein, I find Saltville's CPCN should include the natural gas storage service territory and natural gas pipeline service territory requested in its Application, as more particularly described in the Commission's Order of Notice and Hearing. I further find that the Commission should direct VGPC to submit a request identifying with particularity the service territory it desires to abandon, and the service territory it desires to retain. The abandonment of service territory could be addressed by the Commission in the joint application to transfer utility assets from VGPC to Saltville.

FINDINGS AND RECOMMENDATIONS

Based on the evidence received in this case, and for the reasons set forth above I find that:

(1) Saltville has satisfied the criteria for the issuance of a preliminary CPCN, pursuant to § 56-265.2 of the Code of Virginia, to test, develop, construct, maintain and own an underground natural gas storage facility in Saltville, Virginia;

(2) The Commission should defer issuing Saltville its final CPCN allowing it to operate the Storage Facility until after the filing of certain test results, engineering studies, operations manuals, and engineering plans and specifications with the Commission, as detailed in this Report;

(3) Since the viability and timely completion of the project may be impacted by Saltville's ability to dispose of brine produced in cavern development, the Commission should

[16] *See*, 49 C.F.R. § 192.609 Change in Class Location: Required Study.

[17] Maps identifying Saltville's proposed certificated service territory, VGPC's existing certificated service territory, VGPC's proposed reduced certificated service territory, and the proposed natural gas pipeline route may be found at Exhibit 15. Legal descriptions of the Saltville's proposed certificated service area may be found in the Commission's Order for Notice and Hearing entered on December 3, 2001.

monitor Saltville's brine disposal throughout Phase I of the project. Saltville's CPCN should contain a requirement that it file a report with the Commission on or before January 31, 2003, and annually thereafter, identifying the amount of brine actually processed during the preceding calendar year, the brine on hand in the retention ponds at the end of the calendar year, the remaining space available in the retention ponds, a projection of the brine to be produced in the upcoming calendar year from cavern development, a projection of the amount of brine to be processed during the upcoming calendar year, and the method of processing;

(4) Saltville's CPCN should specifically state that it is limited to Phase I of the Storage Facility project, and that Phase II is excluded from the CPCN;

(5) Saltville's CPCN should contain a sunset provision that if Phase I of the project extends beyond December 31, 2007, Saltville shall request additional authority from the Commission to continue development of the project;

(6) Saltville's CPCN should contain a sunset provision that if Saltville fails to develop or operate the Storage Facility, its CPCN will lapse on December 31, 2007, unless Saltville timely files a petition with the Commission requesting an extension of its CPCN, and demonstrates good cause for its delay;

(7) Saltville should be required to file a copy of its management committee's "policies" prior to the issuance of a final CPCN to confirm that the committee exercises supervision and control over the operating manager;

(8) Saltville should be required to file a complete list of the permits required to construct, own, and operate the Storage Facility, and identify the entity required by law, statute, or regulation to hold such permit;

(9) Saltville should be entitled to a business risk, or small company, adjustment in determining its cost of equity capital;

(10) Saltville's 14.45% cost of equity capital is reasonable;

(11) Saltville should be permitted to capitalize interest in accordance with the methodology approved by the Commission in *Virginia Gas Pipeline Co*., Case No. PUE980627, 1999 S.C.C. Ann. Rep. 443;

(12) Saltville should be required to make an Annual Informational Filing after one year of operational data has been accumulated;

(13) Saltville should be required to file a FERC Form 2 within 120 days of the end of the Company's fiscal year;

(14) Saltville's accounting records should comply with the FERC System of Accounts (Conservation of Power and Water Resource, Number 18, Parts 1 to 399, revised as of April 1, 2001);

(15) Saltville should be required to file an application under the Utility Transfers Act to transfer the facilities outlined in this case from VGPC to Saltville;

(16) Saltville's proposed Firm Storage Service and Interruptible Storage Service charges, as modified at the hearing, are reasonable;

(17) Saltville should be afforded an opportunity after it is issued its preliminary CPCN to file amendments to its tariff to address the concerns raised by Public Service and the Staff;

(18) Saltville should be required to provide the cavern test results to the Staff, for an independent review of the results by the Staff's geo-technical expert;

(19) Saltville should be required to comply with the following operations parameters and continued operations monitoring recommendations: (a) *in situ* leakage testing and mechanical integrity tests should be performed on the proposed caverns; (b) maximum cavern pressures should not exceed the equivalent of .75 psi per foot of depth from the ground surface to the cavern roof unless the caverns are hydraulically interconnected. If they are interconnected, the maximum operating pressure should not exceed .70 psi per foot depth; (c) minimum cavern pressures should not fall below .30 psi per foot during the first three years of operation and rapid drops of pressure should be avoided. At the end of three years, the minimum cavern pressure may be reduced to .25 psi, if done in a gradual manner, i.e., less than 150 psi/day; (d) periodic ground level surveys should be conducted using the benchmark network; (e) a survey specialist should be engaged to review the existing survey procedures to improve the accuracy and repeatability of the present survey readings; (f) yearly gamma ray and caliper logging of all active wells; (g) periodic sonar surveys should be used to monitor the dimension and shape of the caverns; (h) injection pressures, flow rates, and cumulative gas volumes should be monitored and recorded according to federal EPA requirements; and (i) the collected data should be integrated to develop a model of ground behavior on a yearly basis;

(20) Saltville should be required to comply with the recommendations contained in Department of Environmental Quality's Coordinated Environmental Review;

(21) Saltville should be required to make corrections to the manuals already filed with the Commission to separately identify the owner of the Storage Facility from the operator of the Storage Facility. Additionally, the Commission should require Saltville to file its Operator Qualification Manual;

(22) Saltville should be required to provide the Staff with the comprehensive specifications for all portions of the pipeline facilities at least 30 days prior to the commencement of construction;

(23) Saltville's CPCN should include the natural gas storage service territory and the natural gas pipeline territory requested in its Application, as more particularly described in the Commission's Order for Notice and Hearing; and

(24) The Commission should direct VGPC to submit a request identifying with particularity the service territory it desires to abandon, and the service territory it desires to retain.

I therefore ***RECOMMEND*** the Commission enter an order that:

(1) ***ADOPTS*** the findings contained in this Report;

(2) ***GRANTS*** Saltville preliminary approval, pursuant to § 56-265.2 of the Code of Virginia, to test, develop, construct, maintain, and own a natural gas storage facility and attendant natural gas pipeline facilities in Saltville, Virginia;

(3) ***DEFERS*** final approval to Saltville to operate its natural gas storage facility until certain filings are made with the Commission; and

(4) ***RETAINS*** jurisdiction of this case until further order of the Commission.

COMMENTS

The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and 5 VAC 5-20-120 C) to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen (15) copies, within twenty-one (21) days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

_____

Michael D. Thomas
Hearing Examiner